

General

Ciba-Geigy Corporation  
Letter, Crowley to Hohman  
Nov. 17, 1988.

Superfund Records Center  
SITE: Ciba-Geigy  
BREAK: 19.00  
OTHER: 651233

1. Letter does not describe an approach which is consistent with the attached outline. The outline appears very similar in scope and sequence to EPA's draft order. Some of the concepts of the letter are not acceptable.

At the meeting, CIBA-GEIGY proposed a plan which would include the negotiation of work plan details and scheduling together, rather than attempting to force a work plan to fit an arbitrary schedule. This reflects the normal practice of deciding what needs to be done before deciding how long it will take to do it. We therefore request permission to develop a work plan and propose an appropriate time frame acceptable to the Agency.

2. This paragraph does not appear to describe an approach which differs from that in EPA's draft order. Furthermore, it does not ~~not~~ explain why the content and timeframes in EPA's order are inappropriate. EPA does not believe that the timeframes in the draft order are arbitrary. Ciba's response does not address acceptable timeframes based on their vision of the project.

The Draft Order also requires that chemical analyses and characterization of the plant site and off-site areas be done concurrently. Since the need for characterization is unnecessary, unless there are contamination levels requiring action, CIBA-GEIGY herewith requests sequencing of the characterization after analysis and evaluation so that characterization can be limited to that data appropriate to potential remediation activities.

3. EPA believes that levels requiring action have been identified at Ciba-Geigy. EPA believes that the appropriate action at this time is an evaluation of the extent of contamination and a risk assessment, in general, and specifically as in sections I through II of the draft order. EPA believes that Ciba-Geigy's premise that characterization is unnecessary is not correct. Furthermore, EPA believes that it may be a wrongful presumption of Ciba-Geigy's comments that the "analysis and evaluation" referred to would necessarily identify the highest levels of contaminants likely to be found. Remedies should not be ~~selected~~ without fully understanding the scope of the problem to be remedied. The scope of the problem is relative to the ~~the~~ levels of contamination, the extent of

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contamination and the exposure scenarios. Exposure scenarios include understanding the hydrology and geology of the subject areas.

The plan requires a health risk assessment which specifies five sampling rounds of Appendix IX compounds as well as indicator compounds to be added by CIBA-GEIGY. We believe that it is inappropriate to sample for Appendix IX compounds which CIBA-GEIGY did not use at the plant site and, therefore, could not have been sourced from CIBA-GEIGY operations. There is little benefit to be gained, for instance, from finding benzo-a-pyrenes and other such coal tar derived materials in the vicinity of the CIBA-GEIGY plant at whatever level they might be present. Since they were not emitted by CIBA-GEIGY, there is no action which should be required of CIBA-GEIGY regarding their presence.

4. The draft order does not require a health risk assessment which specifies five (5) sampling rounds of Appendix IX compounds. EPA agrees that it would not be appropriate for Ciba-Geigy to sample for Appendix IX compounds which could not have been sourced from Ciba-Geigy operations. EPA believes that Appendix IX analyses at the source areas will identify compounds from Ciba-Geigy operations. Subsequent analyses could be based on these findings and any other information on source constituency. The health risk assessment ~~in the~~ draft order specifies identification of indicator chemicals through application of the Superfund Public Health Evaluation Manual, 1986.

CIBA-GEIGY proposes to identify products, intermediates, and raw materials used at the Cranston site. Upon toxicological review of these materials, we will identify those which have a potential adverse impact on health or the environment. . . . . it would then be determined whether such materials have, in fact, been released by CIBA-GEIGY. If so, CIBA-GEIGY agrees to develop a corrective measure study.

5. In conjunction with the approach described in EPA's draft order for identifying sampling parameters and as summarized in number four (4) above, Ciba-Geigy may identify products, intermediates, raw materials, all known wastes and potential by products. EPA believes that ~~information is available~~ ~~available~~ which indicates that some material

has been released by Ciba-Geigy which are known to have adverse impact on health or the environment.] This information is the basis for EPA's intention to impose a corrective action program at Ciba-Geigy through issuance of an order. Consequently the conditions Ciba-Geigy describes as necessary for undertaking studies at the site are present.

[EPA does not believe that an agreement as to what levels of concentration is required to present a particular risk is necessary at this time as a preclusion to understanding the source chemistry, extent of contamination, and geology/hydrology of the subject areas. EPA would agree that a more comprehensive understanding of source chemistry and concentrations is outstanding. EPA does not necessarily agree that public concern would be minimized simply because of an agreement between EPA and the facility. Public concern will have to be managed in all cases by communicating the sensibility of the corrective action process and the safeguard assurances it provides as interim measures. As in the example portrayed by Ciba-Geigy, EPA will continue to use available information as a reference for evaluating any potential harms.

CIBA-GEIGY believes further that finding a presence of materials which could have been emitted from CIBA-GEIGY operations does not on its face present a risk to the environment unless the toxicity, concentration, and persistence of the materials are sufficient to present an actual risk.

- c. EPA agrees that many factors are utilized in conducting public health and environmental risk evaluations, <sup>some of which Ciba-Geigy has identified. Many components of EPA's draft order</sup> of EPA's draft order are also components of a risk evaluation. Consequently EPA agrees with Ciba-Geigy's

statements on the relevance of the information required in EPA's draft order for conducting a risk evaluation. Accordingly, EPA disagrees that such an evaluation can be adequately performed in the absence of this information as suggested by Ciba-Geigy through pre-agreements. EPA also believes that ~~the actual risk referred to by Ciba-Geigy is a continuation of terms~~, <sup>risk</sup> assessments are an estimation of <sup>a</sup> probability and do not <sup>necessarily</sup> portray certainty.

We therefore agree that with respect to on-site operations a work plan and schedule will be developed and submitted within 60 days of finalization of this Draft Order as proposed by the Agency to include in Phase I:

1. Main Plant Production Area Off Mill Street
2. Wastewater Treatment Plant Area Off Warwick Avenue
3. Dredged Sediment Area Off Vine Street

We further propose to develop separate work plans, thereafter, to address off-site areas as part of the Order:

4. Pawtuxet River Area
5. Neighborhood Area One Mile Radius

This sequential approach allows time for the Agency and CIBA-GEIGY to identify indicator compounds and agree to action levels which will require a corrective measures study. The presence of pre-agreed action levels for these materials will be the trigger to initiate characterization necessary for a corrective measure study.

7. It is not clear as to when a work plan for off-site investigations will be submitted and whether off-site investigations are a part of Phase I. The Summary of Phases indicates that <sup>off-site</sup> areas are a component of Phase I activity. EPA believes that all areas and all media of concern are to be sampled twice during Phase I and that this approach is not inconsistent with the sequential approach described in Ciba-Geigy's comments. Consequently EPA would expect all work plans for all areas subject to the order to be submitted within sixty (60) days. The proposed schedules in the work plans may reflect the initiation of certain tasks upon completion of others such as identification of Appendix II constituents. All Phase I

tasks must be completed within six (6) months.

EPA has addressed the concept of an agreement of action levels previously. The phrase "characterization has been used throughout Ciba-Geigy's comments and in EPA's draft order. Its meaning may not be the same as used in these documents. EPA expects source areas of contamination to be characterized, the extent of the contamination to be characterized, and the geology and hydrology (environmental setting) to be characterized. It is not apparent which context Ciba-Geigy intends for use of characterization.

During Phase I, CIBA-GEIGY will take all steps necessary to characterize the on-site geology, hydrogeology, and stratigraphy for those plant locations in which this information is potentially necessary for a corrective measure study. Clearly, in areas where remediation activities do not require such information or where no remediation is required, no characterization needs to be undertaken.

8. It is not clear how broadly Ciba-Geigy intends to apply this concept. EPA will withhold comment until the RFI proposal is submitted. EPA believes, however, that an understanding of the site geology and hydrology is necessary to validate the adequacy of monitoring well networks and the adequacy of the public health and environmental risk evaluation. Consequently, EPA anticipates that the RFI proposal will address the acquisition of the above referenced information, as it may be related to each subject area of the order.